

IN THE CLAIMS:

Please add new Claims 86 to 105, and amend Claims 31, 51, 58, 66, as shown below.

1. to 30. (Cancelled).

31. (Currently Amended) A remote maintenance system for industrial equipment installed at a remote location, said system comprising:

a database system which is connected to ~~[[the]]~~ an internet and which stores maintenance information relating to the industrial equipment, wherein the maintenance information includes both status information relating to the industrial equipment and response information which is associated with the status information and which is used for handling a problem associated with the industrial equipment, as defined by the status information; and

a security system that allows a limited user of the industrial equipment to access the database system through the internet to derive the maintenance information for handling the problem associated with the industrial equipment.

32. (Previously Presented) The system according to claim 31, wherein said database is updated based on the access of the user.

33. (Previously Presented) The system according to claim 31, wherein said database stores information for identifying an industrial equipment, problem states that may occur in the identified industrial equipment, and corresponding countermeasures against the problem states.

34. (Previously Presented) The system according to claim 31, wherein said database system automatically notifies an appropriate personnel of the problem with the industrial equipment.

35. (Previously Presented) The system according to claim 34, wherein said database system automatically sends an e-mail to the appropriate personnel.

36. (Previously Presented) The system according to claim 31, further comprises a LAN system connecting a plurality of computers and the database system, each of the plurality of computers being capable of accessing the database system through the LAN system.

37. (Previously Presented) The system according to claim 31, wherein said security system comprises at least one of a codec system providing an encoded communication and a fire wall.

38. (Previously Presented) The system according to claim 37, wherein said codec system periodically changes codec algorithms.

39. (Previously Presented) The method according to claim 31, wherein the industrial equipment comprises a semiconductor manufacturing apparatus, and wherein the maintenance information comprises problem information of the semiconductor apparatus.

40. to 50. (Cancelled)

51. (Currently Amended) A method for sharing information relating to industrial equipment, comprising:

providing a database system which is connected to ~~[[the]]~~ an internet and which stores maintenance information relating to the industrial equipment, wherein the maintenance information includes both status information relating to the industrial equipment and response information associated with the status information and which is used for handling a problem associated with the industrial equipment, as defined by the status information;

allowing a first specified user of the industrial equipment with a first security system to access the database through the internet to derive the maintenance information; and

allowing a second specified user, different from the first specified user, of the industrial equipment with a second security system to access the database system through the internet to derive the maintenance information, wherein the first and second security systems have different kinds of codec systems from each other.

52. (Previously Presented) The method according to claim 51, wherein the database stores information for identifying an industrial equipment, problem states that may occur in the identified industrial equipment, and corresponding countermeasures against the problem states.

53. (Previously Presented) The method according to claim 51, further comprising a step of automatically notifying an appropriate personnel of the problem associated with the industrial equipment.

54. (Previously Presented) The method according to claim 53, wherein said notifying step comprises automatically sending an e-mail to the appropriate personnel.

55. (Previously Presented) The method according to claim 51, wherein each of the first and second security systems comprises at least one of a codec system providing an encoded communication and a fire wall.

56. (Previously Presented) The method according to claim 51, wherein each of the codec systems periodically changes codec algorithms.

57. (Previously Presented) The method according to claim 51, wherein the industrial equipment comprises a semiconductor manufacturing apparatus and the information comprises problem information associated with the semiconductor apparatus.

58. (Currently Amended) A method for sharing information of industrial equipment, comprising:

providing a first database system which is connected to [[the]] an internet and which stores first maintenance information relating to first industrial equipment, wherein the first maintenance information includes both first status information of the first industrial equipment and first response information which is associated with the first status information and which is used for handling a problem associated with the first industrial equipment as defined by the first status information;

providing a second database system which is connected to the internet and which stores second maintenance information relating to second industrial equipment, wherein the second maintenance information includes both second status information of the second industrial equipment and second response information which is associated with the second status information and which is used for handling a problem associated with the second industrial equipment as defined by the second status information; and

allowing a limited user of the first industrial equipment and the second industrial equipment with security systems to access the first database system and the second database system through the internet and derive the first and second maintenance information.

59. (Previously Presented) The method according to claim 58, wherein each of the databases stores information for identifying industrial equipment, problem states that may occur in the identified industrial equipment, and corresponding countermeasures against the problem states.

60. (Previously Presented) The method according to claim 58, further comprising a step of automatically notifying an appropriate personnel of the problem associated with the first industrial equipment or the second industrial equipment.

61. (Previously Presented) The method according to claim 60, wherein said notifying step comprises automatically sending an e-mail to the appropriate personnel.

62. (Previously Presented) The method according to claim 58, wherein the security system includes at least one of a codec system providing an encoded communication and a fire wall.

63. (Previously Presented) The method according to claim 62, wherein each of the codec systems periodically changes codec algorithms.

64. (Previously Presented) The method according to claim 58, wherein each of the first industrial equipment and the second industrial equipment includes a semiconductor manufacturing apparatus and the information includes problem information associated with the semiconductor apparatus.

65. (Previously Presented) The method according to claim 58, wherein the first database system and the second database system are provided by different vendors.

66. (Currently Amended) A method for sharing information relating to industrial equipment, the method comprising the steps of:

providing a database system which is connected to ~~[[the]]~~ an internet and which stores maintenance information relating to industrial equipment, wherein the maintenance information includes both status information of the industrial equipment and response information which is associated with the status information and which is used for handling a problem associated with the industrial equipment, as defined by the status information;

connecting a plurality of departments of a vendor which provides the industrial equipment, with a computer network system such that each of the plurality of departments is able to access the database system to derive the maintenance information, the plurality of departments including at least a maintenance department, a manufacturing department and a developing department; and

allowing a user of the industrial equipment with a security system to access the database system through the internet to derive the maintenance information.

67. (Previously Presented) The system according to claim 66, wherein each of the departments is able to fully access the database system and the user is able to access limited information of the database system.

68. (Previously Presented) The method according to claim 66, wherein the database stores information for identifying an industrial equipment, problem states that may occur in the identified industrial equipment, and corresponding countermeasures against the problem states.

69. (Previously Presented) The method according to claim 66, further comprising a step of automatically notifying an appropriate personnel of problem associated with the industrial equipment.

70. (Previously Presented) The method according to claim 69, wherein said notifying step includes automatically sending an e-mail to the appropriate personnel.

71. (Previously Presented) The method according to claim 66, wherein the security system includes at least one of a codec system providing an encoded communication and a fire wall.

72. (Previously Presented) The method according to claim [[66]] 71, wherein each of the codec systems periodically changes codec algorithms.

73. (Previously Presented) A system according to claim 66, wherein the industrial equipment comprises a semiconductor manufacturing apparatus and the information comprises problem information relating to the semiconductor apparatus.

74. (Previously Presented) The system according to Claim 31, further comprising a information transmitting system which transmits the status information relating to the industrial equipment to the database through the internet.

75. (Previously Presented) The system according to Claim 31, wherein the internet uses a TCP/IP communication protocol.

76. (Previously Presented) The system according to Claim 31, wherein the internet is a worldwide communication system.

77. (Previously Presented) The method according to Claim 51, further comprising a step of transmitting the status information relating to the industrial equipment to the database through the internet.

78. (Previously Presented) The method according to Claim 51, wherein the internet uses a TCP/IP communication protocol.

79. (Previously Presented) The method according to Claim 51, wherein the internet is a worldwide communication system.

80. (Previously Presented) The method according to Claim 58, further comprising a step of transmitting the status information relating to the industrial equipment to the first and second database through the internet.

81. (Previously Presented) The method according to Claim 58, wherein the internet uses TCP/IP communication protocol.

82. (Previously Presented) The method according to Claim 58, wherein the internet is a worldwide communication system.

83. (Previously Presented) The method according to Claim 66, further comprising a step of transmitting the status information relating to the industrial equipment to the database through the internet.

84. (Previously Presented) The method according to Claim 66, wherein the internet uses a TCP/IP communication protocol.

85. (Previously Presented) The method according to Claim 66, wherein the internet is a worldwide communication system.

86. (New) An exposure apparatus maintained by a remote maintenance system defined in Claim 31.

87. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus being maintained by a remote maintenance system defined in Claim 31; and
developing the exposed wafer.

88. (New) An exposure apparatus, maintenance information thereof being shared by a method defined in Claim 51.

89. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus,
maintenance information thereof being shared by a method defined in Claim 51; and
developing the exposed wafer.

90. (New) An exposure apparatus, maintenance information thereof being shared by a method defined in Claim 58.

91. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus,
maintenance information thereof being shared by a method defined in Claim 58; and
developing the exposed wafer.

92. (New) An exposure apparatus, maintenance information thereof being shared by a method defined in Claim 66.

93. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus,
maintenance information thereof being shared by a method defined in Claim 66; and
developing the exposed wafer.

94. (New) A remote maintenance system for an exposure apparatus installed at a remote location, said system comprising:

a database system which stores maintenance information relating to the exposure apparatus, wherein the maintenance information includes both status information relating to the exposure apparatus and response information which is associated with the status information and which is used for handling a problem associated with the exposure apparatus, as defined by the status information; and

a security system that allows a limited user of the exposure apparatus to access the database system to derive the maintenance information.

95. (New) An exposure apparatus maintained by a remote maintenance system defined in Claim 94.

96. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus being maintained by a remote maintenance system defined in Claim 94; and
developing the exposed wafer.

97. (New) A method for sharing information relating to an exposure apparatus, comprising:

providing a database system which stores maintenance information relating to the exposure apparatus, wherein the maintenance information includes both status information relating to the exposure apparatus and response information associated with the status information and which is used for handling a problem associated with the exposure apparatus, as defined by the status information;

allowing a first specified user of the exposure apparatus with a first security system to access the database to derive the maintenance information; and

allowing a second specified user, different from the first specified user, of the exposure apparatus with a second security system to access the database to derive the maintenance information, wherein the first and second security systems have different kinds of codec systems from each other.

98. (New) An exposure apparatus, maintenance information thereof being shared by a method defined in Claim 97.

99. (New) A device manufacturing method, comprising:

exposing a wafer with a circuit pattern by using an exposure apparatus, maintenance information thereof being shared by a method defined in Claim 97; and
developing the exposed wafer.

100. (New) A method for sharing information of an exposure apparatus, comprising:

providing a first database system which stores first maintenance information relating to a first exposure apparatus, wherein the first maintenance information includes both first status information of the first exposure apparatus and first response information which is associated with the first status information and which is used for handling a problem associated with the first exposure apparatus as defined by the first status information;

providing a second database system which stores second maintenance information relating to a second exposure apparatus, wherein the second maintenance information includes both second status information of the second exposure apparatus and second response information which is associated with the second status information and which is used for handling a problem associated with the second exposure apparatus as defined by the second status information; and

allowing a limited user of the first exposure apparatus and the second exposure apparatus with security systems to access the first database system and the second database system and derive the first and second maintenance information.

101. (New) An exposure apparatus, maintenance information thereof being shared by a method defined in Claim 100.

102. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus,
maintenance information thereof being shared by a method defined in Claim 100; and
developing the exposed wafer.

103. (New) A method for sharing information relating to an exposure
apparatus, the method comprising the steps of:
providing a database system which stores maintenance information relating
to an exposure apparatus, wherein the maintenance information includes both status
information of the exposure apparatus and response information which is associated with
the status information and which is used for handling a problem associated with the
exposure apparatus, as defined by the status information;
connecting a plurality of departments of a vender which provides the
exposure apparatus, with a computer network system such that each of the plurality of
departments is able to access the database system to derive the maintenance information,
the plurality of departments including at least a maintenance department, a manufacturing
department and a developing department; and
allowing a user of the exposure apparatus with a security system to access
the database system to derive the maintenance information.

104. (New) An exposure apparatus, maintenance information thereof
being shared by a method defined in Claim 103.

105. (New) A device manufacturing method, comprising:
exposing a wafer with a circuit pattern by using an exposure apparatus,
maintenance information thereof being shared by a method defined in Claim 103; and
developing the exposed wafer.